

**AMENDMENT TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

Claim 1 (currently amended) A method for motion compensation video, comprising:

- (a) assessing parameters of a packetized transmission channel;
- (b) assessing sizes of intra-coded frames and predictively-coded frames for an input video;
- (c) setting the rate of intra-coded frames and the rate of predictively-coded frames by maximizing a probability of correct frame reconstruction using the results of steps (a) and (b), wherein said ~~probability of correct frame reconstruction includes a rate of repeated transmission of predictively-coded frames~~ said probability is taken as  $q_0(1 - p_{e0})/(q_0 + q_1 p_{e1})$  where  $q_0$  is the probability of an intra-coded frame,  $q_1$  is the probability of a predictively-coded frame,  $p_{e0}$  is the probability of a transmitted intra-coded frame being lost, and  $p_{e1}$  is the probability of a transmitted predictively-coded frame being lost.

Claim 2 (original) The method of claim 1, wherein:

- (a) said transmission channel is the Internet; and
- (b) said predictively-coded frames are P-frames.

Claim 3 (original) The method of claim 1, wherein:

- (a) said parameters of step (a) of claim 1 include the packet loss rate over said transmission channel.

Claim 4 (cancel)

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Claim 5 (currently amended) A motion compensation controller for video, comprising:

- (a) a first input for channel parameters of a packetized transmission channel;
- (b) a second input for video parameters; and
- (c) a probability maximizer coupled to said first and second inputs and with an output

of an intra-coded frame transmission rate over said channel, a predictively-coded frame transmission rate over said channel, and a repetition rate for transmission of said predictively-coded frames over said channel; said probability maximizer maximizes a probability of correct frame reconstruction using said first and second inputs wherein said probability of correct frame reconstruction includes a rate of repeated transmission of predictively-coded frames is taken as  $q_0(1 - p_{e0})/(q_0 + q_1 p_{e1})$  where  $q_0$  is the probability of an intra-coded frame,  $q_1$  is the probability of a predictively-coded frame,  $p_{e0}$  is the probability of a transmitted intra-coded frame being lost, and  $p_{e1}$  is the probability of a transmitted predictively-coded frame being lost.